

**NEWCASTLE - OTTAWA QUALITY ASSESSMENT SCALE  
ADAPTED FOR CROSS-SECTIONAL/ CASE-CONTROL STUDIES**

**Review: chronic pain and EEG patterns**

Adapted from: Herzog et al., 2013<sup>1</sup> and; Eijkemans et al., 2012<sup>2</sup>

Note: A study can be awarded a maximum of one star for each numbered item within the Selection and Exposure categories. A maximum of two stars can be given for Comparability.

**Selection (Maximum 4 stars)**

- 1) Is the case definition (chronic pain) adequate?
  - a) yes, with independent validation (eg. self reported doctor's diagnosis, reference to primary medical record source, international criteria) ★
  - b) yes, based on self reports
  - c) no description
- 2) Representativeness of the cases
  - a) Truly representative of the average in the target population. (all subjects or random sampling) ★
  - b) Somewhat representative of the average in the target population. (non-random sampling) ★
  - c) Selected group of users
  - d) No description of the sampling strategy
- 3) Selection of Controls
  - a) Matched by sex and/or age ★
  - b) Matched by other factor
  - c) No description
- 4) Definition of Controls
  - a) No history of pain ★
  - b) No description of source

**Comparability (Maximum 2 stars)**

- 1) Comparability of cases and controls on the basis of the design or analysis
  - a) The study controls for the most important factor (anxiety/depression). ★
  - b) The study control for any additional factor. (eg. medication usage, duration of pain ) ★

**Outcome (Maximum 3 stars)**

- 1) Assessment of outcome (EEG findings)
  - a) Independent blind assessment ★
  - b) Clear description of method for EEG data acquisition (number and placement of electrodes, equipment, sample rating) and data processing (how the parameters were extracted from the EEG data) ★
  - c) No description of method for EEG data acquisition and/or data processing
- 2) Statistical test
  - a) The statistical test used to analyze the data is clearly described and appropriate, and the measurement of the association is presented, including confidence intervals and the probability level (p value). ★
  - b) The statistical test is not appropriate, not described or incomplete.

1- Herzog R, Álvarez-Pasquin MJ, Díaz C, Del Barrio JL, Estrada JM, Gil Á. Are healthcare workers' intentions to vaccinate related to their knowledge, beliefs and attitudes? A systematic review. BMC Public Health. 2013 Feb 19;13:154

2 - Eijkemans M1, Mommers M, Draaisma JM, Thijs C, Prins MH. Physical activity and asthma: a systematic review and meta-analysis. PLoS One. 2012;7(12):e50775.